

EXECUTIVE SUMMARY

THE ANACONDA CORPORATION

Carr Fork Project
ACT/045/004
Tooele County, Utah

GENERAL:

The Anaconda Corporation has recently begun shipping copper concentrate from renovated mine workings and facilities near Tooele, Utah. A reprint from the "Engineering and Mining Journal" of January, 1979 is attached. The article gives an excellent overview of the project.

LOCATION:

The underground mining operation and mill are located in Pine Canyon, a steep, narrow canyon draining a portion of the west flank of the Oquirrh Mountains. The hoist facilities are located approximately 1 1/2 miles west of the Bingham Canyon Copper Pit.

SOILS AND GEOLOGY:

Soils tend to be relatively shallow and poorly developed.

The Carr Fork ore deposits lie under the western flank of the Oquirrh Mountains at a depth of 2,000 to 6,000 feet. The ore is a skarn formed in two limestone units enclosed by quartzites, all of which are Pennsylvanian in age.

The orebodies have an average overall dimension of approximately 2,950 feet by 3,300 feet and show exceptional continuity, with few unmineralized zones within the presently defined boundaries. The two mineralized limestone beds range in thickness from about 80 to 250 feet.

Dips range from vertical to 20 degrees and the strike varies from east-west to northeast-southwest. Hangingwall and footwall rocks are generally unmineralized quartzites, with the exception of some minor areas of copper mineralization in the hangingwall. The ore is moderately hard and tough, while the waste rock is hard, brittle and fractured.

The mine's surface facilities are located within Pine Canyon on alluvial and colluvial deposits. A tailings dam is constructed on the alluvial fan at the mouth of the canyon.

HYDROLOGY:

The area is subject to extensive snowfall and summer thunderstorm events. The surface facilities in the bottom of Pine Canyon are protected by a massive diversion system.

Mine water is pumped from underground and transported to settling ponds near the tailings pond through a concrete flume and ditch. Effluent from the settling ponds is used by local farmers for irrigation.

The groundwater table within Tooele Valley is located approximately 650 feet below the tailings pond.

ECOLOGY:

The canyon walls are sparsely vegetated with Pinyon-Juniper, maple and elderberry. Grass understory consists of ragweed, gum weed, sunflowers, wheatgrass, squirrel tail grass, wild rye, wild lettuce, tall native blue grass, rabbitbrush and herbaceous aster according to Anaconda.

Due to past smelting activities at the canyon mouth vegetation has in the past been very sparsh. Anaconda has revegetated much of the area by turning the soil over and replanting grass.

STRUCTURES AND FACILITIES:

Four shafts are in use, three of which reach the surface. Surface facilities located in Pine Canyon are detailed in the enclosed "Engineering and Mining Journal" reprint. Tailings will be contained in a 7,700 foot long by 54 foot starter embankment. Approximately 600 acres of land surface will be affected.

MINING AND RECLAMATION PLAN:

Anaconda has committed to the following items in their Mining and Reclamation Plan:

SUMMARY OF RECLAMATION COMMITMENTS

- A. Unusable buildings will be removed when operations are permanently terminated. All trash, scrap metal and other debris will be properly disposed of.
- B. Tests will be conducted to determine the best revegetation procedures for the various disturbed areas.

- C. Mine waste will be disposed of in stable dumps.
- D. Disturbed areas will be revegetated where such revegetation is technically and economically feasible.
- E. All diversion structures will be designed as maintenance free facilities.
- F. The mine water settling ponds will be left in a self-draining condition after operations are permanently terminated.

The Division staff feels the Mining and Reclamation Plan is approvable with the following stipulations:

- A. Plant species, seeding and planting rates, soil amendments and revegetation techniques must be approved by the Division prior to termination of mining. Selection of the above will be based upon up-to-date technology, research and Anaconda's test plots.
- B. Disturbed areas not directly required for mining operations shall be promptly revegetated with grasses, shrubs and forbs.
- C. All roads not required for a documented and approved post mining use shall be obliterated and the affected area revegetated.
- D. Reclamation practices shall continue until revegetation reaches the surface cover standard of Rule M(12).

SURETY:

The Division proposes a surety contract with Anaconda that specifies reclamation practices but leaves the amount open. Surety arrangements will be finalized prior to final approval.